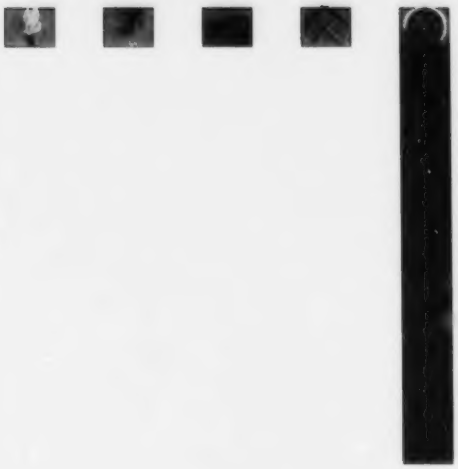

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Letter From The Minister To The Lieutenant Governor

December 1999

His Honour the Honourable Garde B. Gardom

Lieutenant-Governor of British Columbia

May It Please Your Honour:

I respectfully submit the annual report for the Environmental Assessment Office for the period from April 1, 1998 to March 31, 1999.

Honourable Joan Sawicki

Minister of Environment, Lands and Parks

Letter from Deputy Minister

December 1999

The Honourable Joan Sawicki

Minister of Environment, Lands and Parks

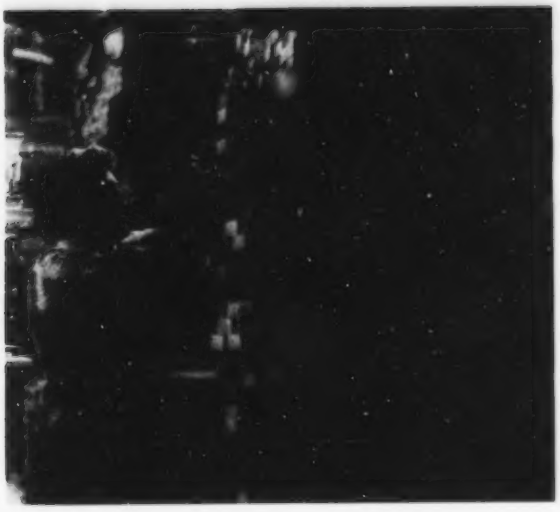
Province of British Columbia

Minister:

It is my honour to submit the annual report of the Environmental Assessment Office. This report details the office's activities for the period from April 1, 1998 to March 31, 1999.

Sheila Wynn

Deputy Minister & Executive Director



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Introduction

This is the third annual report of the Environmental Assessment Office (EAO), covering the period between April 1, 1998 and March 31, 1999. The EAO was established under the Environmental Assessment Act, which became law in June 1995.

The EAO is a provincial agency that coordinates assessment of the impact of major development proposals in B.C. - from hydroelectric dams and pulp mills to ski resorts and waste management facilities.

When a proponent such as a company, utility or municipality proposes a large-scale development or modification to an existing development, it enters into pre-application discussions with the EAO. Once an application is submitted, the office oversees a review process that includes up to three stages.

One of the first steps in the review is the formation of a project committee, which consists of representatives from provincial, federal and local governments, and First Nations. The committee, under the direction of the EAO, is responsible for ensuring project reviews:

- are comprehensive and technically sound;
- involve all potentially interested parties;
- are conducted in an open, timely and efficient manner; and
- adhere to the legislation.

Environmental, economic, social, cultural, heritage and health effects are all considered in the review process. The intent of the process is to identify any foreseeable adverse impacts throughout the life cycle of a project – including construction, start-up, operation and shut-down – and to determine ways to eliminate, minimize or mitigate those impacts.

The review process results in recommendations to either grant or refuse a project approval certificate. The recommendations are considered, and a decision made by the Minister of Environment, Lands and Parks and a second appropriate minister. For example, the Minister of Energy and Mines would be the second minister for a mining project.

A key feature of the environmental assessment process is the opportunity for review and comments by the public. Public participation includes notification and information about the project as well as early and ongoing consultation to identify and address public concerns.

The proponent's public consultation program is reviewed and monitored by the project committee. The EAO undertakes additional public consultation where appropriate.

First Nations whose traditional territories are near a proposed project are invited to sit on the project committee and are consulted by the proponent and the EAO during the review process. The review of a project includes an assessment of any potential adverse impacts on First Nations' interests. The proponent must keep First Nations informed and consult with them regularly. The EAO monitors and evaluates these information and consultation sessions and may direct the proponent to take further measures.

The public can view project documentation such as applications, project reports, public comments, and recommendations and decisions at the Project Registry in Victoria. Key documents are also available in locations such as public libraries, and municipal and band offices near the site of the proposed project.

Much of the current registry information is featured on the EAO's Web site. (www.eao.gov.bc.ca)

Improving the EA Process

Action on the EA evaluation

In January 1997, Barry Sadler, an independent environmental consultant, was commissioned to review the performance of the EA process. Saddler's report, which was completed in late 1997, made a number of recommendations to improve the operational efficiency and effectiveness of the environmental assessment process.

In early 1998, the EAO prepared a corporate response action plan to address many of the issues raised in the report. One of the key initiatives in the plan was to improve the efficiency of the environmental assessment process by developing more appropriate thresholds to define the size of projects subject to EA review. The criteria for determining which projects require a full environmental assessment are contained in the Reviewable Projects Regulation. In late 1998, this regulation was amended. The regulation changes mean that smaller development proposals will be considered through ministry review and permitting processes rather than extensive review under the *Environmental Assessment Act.*

Support for the SkyTrain process

On September 17, 1998, a special commission was established to address environmental issues related to the construction and operation of an extension to the Lower Mainland SkyTrain. The EAO provided administrative and technical support to the commission that included:

- use of the Project Registry system for documentation and distribution of information;
- creation of eight satellite registries throughout the study area;
- design and maintenance of a Web site bulletin board to allow free access and flow of information;
- development of an information-sharing protocol with the Rapid Transit Project Office (RTPO) which is coordinating the SkyTrain extension;
- assistance with development of a letter of understanding between the commission and the Canadian Environmental Assessment Agency to coordinate the two reviews;
- advisory support to the RTPO on assessment processes and the special commissioner on technical issues;
- design and implementation of public forums and workshops;
- management of technical and independent consultant reviews;
- establishment of effective working relationships with regional and local governments as well as key stakeholder groups;
- provision of mapping services to enhance communications to the public and stakeholders; and
- creation and management of an inter-agency committee to coordinate public and stakeholder input to the review process.

Section 4 reviews

Under Section 4 of the *Environmental Assessment Act*, the Minister of Environment, Lands and Parks has the power to order a review for a project that does not meet the thresholds in the Reviewable Projects Regulation.

A decision to use Section 4 of the legislation will only be made if the Minister believes the project may have a significant adverse effect and that the review is in the public interest. Any person or agency can apply to the Minister for a

project to be designated as reviewable. The review must commence before the project is underway.

The Minister has received about 18 Section 4 requests since the Act was established. Most of these requests were rejected because either the projects were not deemed to have the potential for significant adverse effects or it was not in the public interest to bring the projects into the EA process.

The minister has only ordered two Section 4 reviews, one for the Bamberton Town Development project. The proponent for that project has subsequently withdrawn its proposal to the EAO. The second was for the reconstruction of Lion's Gate Bridge into four lanes. The latter project did not proceed.

Many of the Section 4 requests that were rejected were for residential projects. These projects are not included as a category of reviewable projects under the Act for a number of reasons including:

- Legal authority to review and approve residential development projects on private land is delegated to local governments.
- Local governments engage in a comprehensive planning process that considers a wide range of social, environmental and economic factors.
- In recent years, the province has strengthened the ability of local governments to manage environmental implications of land development projects enabling them to require environmental studies by developers.
- Local governments have a variety of referral and approval processes with government agencies that provide for protection of provincial interests in areas such as environmental protection, economic impact, health, and safety.

Section 4 of the Environmental Assessment Act was not designed to be used to intervene in the legitimate exercise of decision-making authority by other parties, most notably local governments. Section 4 is more properly brought into play where there are significant impact concerns that fall outside the existing regulatory regime.

Certified Projects

Eight projects were certified under the Environmental Assessment Act between April 1, 1998 and March 31, 1999. Five of the projects were in energy, one was in waste disposal and two were in water management.

Projects certified between April 1, 1998 and March 31, 1999

ISLAND COGENERATION POWER PLANT

PROPONENT:

Island Cogeneration Limited Partnership

LOCATION:

Elk Falls, District of Campbell River

DATE OF APPLICATION:

October 1997

DATE OF APPROVAL:

April 1998

VALUE OF INVESTMENT:

$220 million

CONSTRUCTION JOBS (PERSON-YEARS):

200

OPERATING JOBS:

23

The project site is located adjacent to the Fletcher Challenge Canada Ltd. Elk Falls pulp and paper mill, in the District of Campbell River. With a combination of combustion and steam turbines, the power plant will supply steam energy to the pulp and paper mill and 245 megawatts of power for sale to BC Hydro for a minimum of twenty years. Island Cogeneration Limited Partnership is a limited partnership of Fletcher Challenge Energy Canada and Westcoast Power Inc.

The project consists of power and steam generation equipment, plus associated services and infrastructure. The proposed power plant will use an advanced natural gas-fired, combined-cycle design with an annual production capacity of 285 megawatts (MW) of electricity, as well as steam energy for the process needs of the adjacent mill.

Key issues raised during the review included: local traffic management during construction, new access road, air quality and greenhouse gas emissions, environmental and archeological concerns, and the strike at the mill. The main issues raised by First Nations were the historic effects of the mill on aquatic resources, safety of the plant, and employment opportunities.

Island Cogeneration must implement the road construction and traffic management commitments that provide for safety, traffic flow, reduced noise and visual effects. The proponent will establish a community liaison telephone line, participate in a community committee, and provide written reports of complaints and what they have done to resolve them.

The advanced turbine technology is capable of minimal oxides of nitrogen emissions and can meet the provincial air quality objectives. Island Cogeneration has agreed to submit a greenhouse gas mitigation plan.

To mitigate other environmental concerns, Island Cogeneration has agreed to implement the following plans:

- a surface water management plan to mitigate soil erosion and stormwater run-off to Casey Creek;
- a wastewater treatment plan;
- a stormwater management plan;
- a waste management program to prevent contamination of Casey Creek; and
- soils and sediment management plans.

In addition, Island Cogeneration must maintain a buffer of riparian vegetation along Casey Creek during construction, implement an aquatic monitoring program to address potential impacts to water quality and aquatic resources, and conduct a breeding bird survey to minimize potential impact to breeding birds. The proponent must retain an environmental monitor onsite to oversee the environmental management commitments. The company will submit and implement an emergency response plan.

The proponent must invite First Nations monitors to the site during initial ground-breaking to prevent adverse effects to any archeological, heritage or cultural resources.

Island Cogeneration must implement an employment equity program for qualified members of First Nations, and provide reports on the results of its hiring commitments.

As a condition of approval, the strike at the Fletcher Challenge mill must be resolved before the project can proceed.

Fort Nelson thermal power plant

PROPONENT:

BC Hydro and TransAlta Energy Corporation

LOCATION:

Approximately 20 kilometres south of Fort Nelson

DATE OF APPLICATION:

August 1998

DATE OF APPROVAL:

September 1998

VALUE OF INVESTMENT:

$35 million

CONSTRUCTION JOBS (PERSON-YEARS):

50

OPERATING JOBS:

2

The Fort Nelson thermal power plant involves the design, construction, operation, dismantling and abandonment of a 45-megawatt (MW) gas-fired thermal power plant. The site is adjacent to the Westcoast Energy Inc. Fort Nelson Gas Plant, a few kilometres south of Fort Nelson. Westcoast Energy will provide easement for gas supply and power transmission lines over their property. Westcoast Energy will also supply raw water from the Fort Nelson River using its reservoir and water infrastructure and wastewater treatment. Water supply and treatment requirements can be met within the limits of Westcoast Energy's existing water licences and discharge permits.

The combustion turbine power plant will provide base load power to Fort Nelson and replace the unreliable electricity supply currently received from Rainbow Lake, Alberta. Fort Nelson's peak winter demand is approximately 22 MW, and the 20-year peak load is forecast at approximately 34 MW. The surplus power, beyond Fort Nelson's requirements, is to be marketed to northern Alberta.

Concerns about the potential effects of the project on ambient air quality (nitrogen oxides and carbon monoxide), fogging and icing, and greenhouse gases were reviewed by the project committee. It concluded air emissions would not significantly affect ambient air quality in Fort Nelson and increased greenhouse gases in Fort Nelson would be offset by the resulting decrease in Alberta. Other concerns included solid and special waste disposal and spill contingency planning. The project's impact on wildlife habitat was considered insignificant.

As project construction may coincide with peak oil and gas activities in Fort Nelson, BC Hydro and TransAlta have committed to reschedule certain construction activities to alleviate pressure on local accommodations.

The project lies within the traditional territory of the Fort Nelson Indian Band and the Prophet River Indian Band. The Prophet River Band participated as project committee members and had no concerns with respect to traditional use impacts. The Fort Nelson Indian Band, although invited to join the committee, did not participate.

This project was strongly supported by the community as it would provide a secure and reliable source of power to Fort Nelson. All significant effects were identified and adequate measures proposed to prevent or reduce adverse effects to acceptable levels. There were no submissions from environmental organizations concerning this project.

KEENLEYSIDE HYDROELECTRIC POWER PLANT

PROPONENT:

Columbia Power Corporation and Columbia BasinTrust

LOCATION:

Columbia River near Castlegar

DATE OF APPLICATION:

June 1995

DATE OF APPROVAL:

April 1998

VALUE OF INVESTMENT:

$250 million

CONSTRUCTION JOBS (PERSON-YEARS):

1,100

OPERATING JOBS:

11

The Keenleyside hydroelectric power plant involves the construction and operation of a two-turbine power plant at the BC Hydro's Hugh Keenleyside Dam near Castlegar. The project includes:

- a two-unit power plant capable of generating approximately 150 megawatts, located 400 metres downstream of the Keenleyside Dam, plus a 1.5-kilometre approach channel and tailrace channel;
- a 49-kilometre transmission line connecting the power plant to BC Hydro's Selkirk substation south of Fruitvale; and
- the relocation of approximately 650 metres of Broadwater Road around the power plant construction site.

The Keenleyside dam has no power generation facilities at present. The dam is currently operated by BC Hydro to provide flood control and optimize power benefits in Canada and downstream in the U.S. in accordance with the Columbia River Treaty. The Columbia Power Corporation and the Columbia Basin Trust have secured a 12-year, $400 million agreement for the sale of Keenleyside electricity to BC Hydro beginning in 2003.

Consultation on this project was extensive. Environmental concerns focused on fish and wildlife habitat protection. The proponent agreed to undertake measures to protect the environment. These include:

- design changes to reduce potential water temperature increases downstream;
- a comprehensive water-temperature monitoring program including power plant shutdown if necessary;
- comprehensive water quality management and monitoring plans;
- orientation of the tailrace at an angle that will minimize adverse effects on important feeding areas for the endangered white sturgeon, and monitoring and further mitigation if necessary;
- cooperation with BC Hydro on the implementation of operations beneficial for fish and other environmental objectives;
- development and implementation of a comprehensive environmental management plan before construction;
- placement of spoil from the excavations in an area previously used as a source of construction material for the dam in the 1960s. The spoil will be recontoured and rehabilitated for wildlife. Some spoil will be placed in the reservoir to improve fish habitat; and
- a $175,000 annual compensation fund to offset potential effects of entrainment. These funds will be directed to improving the aquatic productivity of the Arrow Reservoir.

The proponents will be preparing a socio-economic monitoring plan and establishing a community impact management committee to mitigate any construction impacts. A traffic management plan will address potential traffic effects.

Columbia Power has committed to fair compensation for private lands required for the transmission line, and has also committed $75,000 each to BC Parks and the Regional District of Central Kootenay for recreation improvements as compensation for the loss of Driftwood Beach recreation area near the dam.

The project is in or near the traditional territories of the Ktunaxa-Kinbasket, Okanagan and Shuswap First Nations. The project approval certificate requires Columbia Power Corporation to:

- achieve and implement First Nations' employment agreements consistent with the Columbia Hydro Constructors agreement with the Allied Hydro Council;
- achieve and implement First Nations' economic development programs; and
- seek First Nations' input into environmental management plans for the power plant and transmission line.

WANETA HYDROELECTRIC POWER PLANT UPGRADE

PROPONENT:

Cominco Ltd.

LOCATION:

Southeast of Trail on the Pend d'Oreille River

DATE OF APPLICATION:

June 1995 (Energy Project Certificate)

DATE OF APPROVAL:

May 1998

VALUE OF INVESTMENT:

$30.0 million

CONSTRUCTION JOBS (PERSON-YEARS):

30

OPERATING JOBS:

No additional jobs

The project consists of the replacement of three of the four turbines and related equipment at the Waneta generating station. The project will require an additional 224 cubic metres per second of water for power production, and will increase the capacity of the Waneta generating station by approximately 106 megawatts.

Cominco's application for an Energy Project Certificate was transferred to the Environmental Assessment review process on June 30, 1995. The review was coordinated by a Project Assessment Director, rather than by a project committee.

The key issue raised during the review was the potential impact on fish habitat, particularly white sturgeon. Cominco was required to complete a number of fisheries studies, which led to a negotiated agreement between: Cominco; Ministry of Environment, Lands and Parks; Department of Fisheries and Oceans; and Columbia Basin First Nations on acceptable fish mitigation and compensation measures.

The project is located on the Pend d'Oreille River immediately upstream of the only known spawning habitat of white sturgeon on the Columbia River north of the border. Cominco has agreed to implement minimum flows from mid-May to August during low-flow years to enhance sturgeon reproduction, and to pay $300,000 to monitor the effects of the minimum flows on white sturgeon reproduction. If the monitoring program concludes that the minimum flows are having a negative effect on sturgeon spawning and egg incubation, the flows will be modified or will revert to pre-project discharges.

Cominco has also agreed to compensate for the loss of shallow water habitat and mountain whitefish spawning habitat caused by increased river levels during high peak flows. Cominco has agreed to create rainbow trout habitat on the Salmo River to compensate for increased entrainment of fish.

In addition, Cominco has agreed to:

- monitor total dissolved gas pressure at the Waneta Dam during specific flow conditions; and
- develop and test an operating plan that may further reduce total dissolved gas pressure production associated with present spillway discharges from the dam by defining optimum spillway release for any given spill condition.

First Nations' participation in the project review was coordinated through the Canadian Columbia River Inter-Tribal Fisheries Commission. The project is within the traditional territory of the Okanagan Nation Alliance and Ktunaxa-Kinbasket Tribal Council.

Cominco has agreed to contribute $15,000 to the fisheries commission to inventory traditional-use activities in the vicinity of the project. First Nations were satisfied with the mitigation and compensation plan.

The socio-economic benefits of the project include: 30 construction jobs, low-cost power to Cominco and more secure employment at the Trail smelter, and an additional $1.8 million for the province in annual water rental fees.

West Stoddart gas processing facility

PROPONENT

Novagas Canada Ltd.

LOCATION

50 km northwest of Fort St. John

DATE OF APPLICATION

December 1997

DATE OF APPROVAL

April 1998

VALUE OF INVESTMENT

$96.8 million

CONSTRUCTION JOBS (PERSON-YEARS)

127

OPERATING JOBS

11

The West Stoddart gas processing facility consists of: a gas processing facility; various pipelines to transport the raw sour gas to the facility, and the products to an extraction plant in Taylor, B.C.; and access roads. The facility will recover a portion of the hydrocarbon liquids, remove hydrogen sulphide and carbon dioxide (the acid gas) and dispose of the acid gas by injecting it into injection wells. This process will produce an estimated 3.2 million cubic metres per day of sweet natural gas and an estimated 1,080 cubic metres per day of natural gas liquids (a mixture of propane and butane and hydrocarbon condensate). These products will be transported 69 kilometres via separate pipelines.

The facility is located largely within the traditional land use area of the Blueberry River and Doig River First Nations. The plant site is in an area of heavy industrial activity, and the rest of the area is largely under cultivation or other landowner activities. The proposed sites of the pipeline should minimize potential impacts on traditional use activities of First Nations.

The Blueberry River First Nations, Doig River First Nations and the Treaty 8 Tribal Association were members of the project committee. Novagas has either carried out or has committed to a number of requests by First Nations. These include:

- hiring a liaison person to facilitate consultation and arrange for environmental monitoring activities with the Blueberry River First Nations;
- hiring the Blueberry First Nations to identify areas of traditional use that require mitigation; and
- hiring environmental monitors from the Doig River First Nations and the Blueberry River First Nations during construction to ensure areas of concern to First Nations are not disturbed. In addition, Blueberry River First Nations will continue consultation with Novagas regarding long-term relations. Another benefit to the Blueberry River Indian Reserve is the possibility of natural gas service.

Environmental issues raised by the Ministry of Environment, Lands and Parks, the federal Department of Fisheries and Oceans, and the Ministry of Forests have been addressed. Mitigation measures include:

- the use of acid gas injection to limit emissions;
- the use of existing roads and rights-of-way to minimize habitat loss;
- measures to prevent animal mortalities during construction and operation; and
- the use of stream crossing methods to avoid or minimize pipeline disturbance to stream or riparian habitats.

BABKIRK SPECIAL WASTE LAND TREATMENT FACILITY

PROPONENT:

Babkirk Land Services Ltd.

LOCATION:

130 kilometres north of Fort St. John

DATE OF APPLICATION:

December 1997

DATE OF APPROVAL:

May 1998

VALUE OF INVESTMENT:

$1 million

CONSTRUCTION JOBS (PERSON-YEARS):

12

OPERATING JOBS:

3

The Babkirk special waste land treatment facility involves the design, construction, operation, dismantling and abandonment of a special waste land treatment facility. The facility would treat or bioremediate hydrocarbon-contaminated soil generated by the activities of the oil and gas industry. Treated soils, no longer characterized as special waste, will be acceptable as fill for industrial sites, or may be returned to the place of origin subject to the approval of the Ministry of Environment, Lands and Parks.

The proposed project site is within the traditional territory of the Blueberry River First Nation. No traditional uses were identified during the review process, but the Blueberry River First Nation plans to maintain an ongoing dialogue with the proponent regarding future concerns and access to adjacent Crown land.

The proposed site is private land and is fenced. No significant adverse impacts on fish, wildlife or their habitat were identified. Potential environmental impacts will be largely mitigated by the requirements of the waste management permit which include an environmental indemnity bond, monitoring of groundwater and leachate, and a closure plan.

There was no public opposition to the project during the public review process. The North Peace Economic Development Commission expressed concern over the impact of the oil and gas industry on rural road infrastructure. The project committee determined this issue to be beyond the scope of the review.

DISTRICT OF CHILLIWACK GROUNDWATER WELL

PROPONENT:

District of Chilliwack

LOCATION:

Chilliwack

DATE OF APPLICATION:

August 1998

DATE OF APPROVAL:

November 1998

VALUE OF INVESTMENT:

$450,000

CONSTRUCTION JOBS (PERSON-YEARS):

0.4

OPERATING JOBS:

No additional jobs

The District of Chilliwack is proposing a 250 litre per second groundwater well to supplement the three existing wells. The well, to be located on the grounds of the Watson Road Elementary School in Chilliwack, will draw on the same aquifer - the Vedder-Sardis Aquifer - as the other three wells that supply the district and will ensure an adequate, clean water supply during peak water demand. The project consists of: well drilling and installation; pump house construction and electrical connection; water transmission main connection; and well operation.

Environmental issues focused on maintaining water quality and quantity. In order to assess the impact of water extraction on the other users of the aquifer, including fish in nearby streams, the district will provide monitoring data of flow rates, notification of low-flow events and any observation of dewatering.

Since the aquifer is vulnerable to contamination from within the capture zone, the district will be implementing a water quality monitoring plan to detect any contamination before it reaches the proposed well. A waterworks emergency response plan will ensure groundwater extracted for domestic use will not be contaminated. In addition, an educational program will encourage businesses and the public to protect the aquifer.

The proposed project is located within the traditional land use area of the Sto:Lo Nation. Although beyond the scope of this review, the Sto:Lo wished to assert their aboriginal title to all the land and resources within their traditional territory, including groundwater. The Sto:Lo Nation hired a consultant to review the application and was satisfied the project would not have an adverse effect on band wells or local surface watercourses, particularly fish-bearing streams. Since the proposed site is on the grounds of a school, no new land will be disturbed.

The district satisfactorily addressed the concerns of the Chilliwack Field Naturalists. There was no opposition from the public. The school will not be disturbed by noise or other disturbances from the securely housed wellhead.

SQUAMISH GROUNDWATER WELL

PROPONENT:

District of Squamish

LOCATION:

Squamish

DATE OF APPLICATION:

November 1998

DATE OF APPROVAL:

March 1999

VALUE OF INVESTMENT:

$3.56 million

CONSTRUCTION JOBS (PERSON-YEARS):

3.8

OPERATING JOBS:

No additional jobs

The project consists of two groundwater well fields at two different sites - Powerhouse Springs and Mamquam River - both in close proximity to the District of Squamish. Each well field will contain three wells with a capacity of 85 litres per second each. At each site, construction will include a control and chlorination building and a watermain to connect the new water supply to the municipal water distribution system. In

addition, the access road to the powerhouse site will be upgraded.

Environmental concerns raised include: potential impact of water flow reductions on fish habitat; potential for aquifer contamination; impacts during construction; and potential impacts from upgrading the access road. The district has addressed these concerns with the following mitigation and prevention plans:

- a monitoring program to ensure groundwater withdrawals will be reduced should flow levels drop;
- a well protection plan, including a community planning team, mapping of potential contamination sources in the capture zones, and measures to prevent contamination;
- a chlorine spill prevention, containment and clean-up plan;
- an environmental protection plan and an environmental monitor to avoid unacceptable impacts; and
- mitigation measures to control possible sedimentation, erosion and siltation caused by upgrading of the access road.

The project is located within the traditional land use area of the Squamish Nation. The Squamish Nation was concerned about procedures around possible archeological finds as well as possible impacts on aquatic invertebrates in Powerhouse Creek. The district agreed to stop work in the area if any archeological items were found and notify the Squamish Nation and the Archeology Branch of the provincial government. The productivity of aquatic invertebrates in Powerhouse Creek is limited due to low temperature and low nutrient concentration. It is unlikely the project would have a significant impact on this source of fish food.

The public had little response to the review. A water-bottling company upstream from one of the sites had concerns about water supply. The district determined there was ample supply for both operations. The use of groundwater rather than river water will improve the quality of the domestic water by reducing risk of exposure to protozoa such as giardia and cryptosporidium, and reducing turbidity which can make water disinfection less effective. The use of groundwater will significantly reduce the withdrawal of water from two rivers which should benefit fish populations.

The project committee is satisfied there will be no significant adverse effects from the project on the aquifer, surface watercourses, neighbouring wells, or water quality.

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Summary of Projects Certified Between April 1, 1998 and March 31, 1999

	Location	Investment	Jobs		Date Certified
Energy		*($Million)*	*Construction (person-years)*	*Operating (permanent)*	
***Island cogeneration power plant** Island Cogeneration Limited Partnership	Elk Falls, District of Campbell River	220.0	200	23	April 1998
Fort Nelson thermal power plant BC Hydro & TransAlta Energy Corporation	20 km south of Fort Nelson	35.0	50	2	September 1998
Keenleyside hydroelectric power plant Columbia Power Corporation & Columbia Basin Trust	Columbia River near Castlegar	250.0	1,100	11	April 1998
Waneta hydroelectric power plant upgrade Cominco Ltd.	Southeast of Trail, on Pend d'Oreille River	30.0	30	–	May 1998
West Stoddart gas processing facility Novagas Canada Ltd.	50 km northwest of Fort St. John	96.8	127	11	April 1998
Energy Totals		**631.8**	**1,507**	**47**	
Waste Disposal					
Babkirk special waste land treatment facility Babkirk Land Services Ltd.	130 km north of Fort St. John	1.0	12	3	May 1998
Waste Disposal Totals		**1.0**	**12**	**3**	
Water Management					
Chilliwack groundwater well District of Chilliwack	Chilliwack	0.45	0.4	–	November 1998
Squamish groundwater well District of Squamish	Near Squamish	3.56	3.8	–	March 1999
Water Management Totals		**4.0**	**4.2**	**–**	

All numerical data provided by proponents.

*The Island cogeneration power plant, which was one of the certified projects for 1998-99, should have been included in the projects under review section of the 1997-98 annual report but was inadvertently omitted.

Summary of Projects Certified Between April 1, 1998 and March 31, 1999

	Location	Investment	Jobs		Date Certified
Energy		*($Million)*	*Construction (person-years)*	*Operating (permanent)*	
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Keenleyside hydroelectric power plant Columbia Power Corporation & Columbia Basin Trust	Columbia River near Castlegar	250.0	1,100	11	April 1998
Waneta hydroelectric power plant upgrade Cominco Ltd.	Southeast of Trail, on Pend d'Oreille River	30.0	30	–	May 1998
West Stoddart gas processing facility Novagas Canada Ltd.	50 km northwest of Fort St. John	96.8	127	11	April 1998
Energy Totals		**631.8**	**1,507**	**47**	
Waste Disposal					
Babkirk special waste land treatment facility Babkirk Land Services Ltd.	130 km north of Fort St. John	1.0	12	3	May 1998
Waste Disposal Totals		**1.0**	**12**	**3**	
Water Management					
Chilliwack groundwater well District of Chilliwack	Chilliwack	0.45	0.4	–	November 1998
Squamish groundwater well District of Squamish	Near Squamish	3.56	3.8	–	March 1999
Water Management Totals		**4.0**	**4.2**	**–**	
GRAND TOTAL		636.8	1,523.2	50	

All numerical data provided by proponents.

*The Island cogeneration power plant, which was one of the certified projects for 1998-99, should have been included in the projects under review section of the 1997-98 annual report but was inadvertently omitted.

Amendments to Projects

Nine project certificate amendments were issued in 1998-99, seven in energy and two in mining.

	Location	Description	Date
Energy			
Island cogeneration power plant Island Cogeneration Limited Partnership	Elk Falls, District of Campbell River	Transfer ownership to Island Cogeneration Limited Partnership (owned by Fletcher Challange Canada Ltd. & Westcoast Power Inc.)	October 1998
Keenleyside hydroelectric power plant Columbia Power Corporation & Columbia Basin Trust	Columbia River near Castlegar	Amendment No 1: Allow a minor modification to the design and location of the transmission line corridor	December 1998
Keenleyside hydroelectric power plant Columbia Power Corporation & Columbia Basin Trust	Columbia River near Castlegar	Amendment No 2: Include Arrow Lakes Power Development Corporation as a second holder of the certificate	December 1998
Keenleyside hydroelectric power plant Columbia Power Corporation & Columbia Basin Trust	Columbia River near Castlegar	Amendment No 3: Allow minor amendments to the design and construction of the power plant component of the project	February 1999
Seven Mile Unit 4 hydroelectric power plant BC Hydro & Power Authority	Near Trail	Extend the date for completing the archaeological impact assessment by one year to April 25, 1999	August 1998
West Stoddart gas processing facility Novagas Canada Ltd.	50 km northwest of Fort St. John	Amendment No 1: Allow minor modification of plant orientation and certain pipelines due to engineering refinements	June 1998
West Stoddart gas processing facility Novagas Canada Ltd.	50 km northwest of Fort St. John	Amendment No 2: Allow the addition of the Rigel Lateral to the gathering line	August 1998
Mines			
Mount Milligan copper/gold mine Placer Dome (CLA) Ltd.	North central B.C.	Renewal of the certificate for five years from the date of expiry, November 1998	November 1998
The Sulphurets gold project Newhawk Gold Mines Ltd.	North of Stewart	Renewal of the certificate for three years from the date of expiry, September 1997	November 1998

PROJECTS UNDER REVIEW AS OF MARCH 31, 1999

Projects Under Review

PROJECTS UNDER REVIEW

The EAO had 12 projects under review as of March 31, 1999 - three energy, five mining, three tourism and recreation and one transportation. Four projects were considered dormant because there was no activity in the review process. These projects are: Crowsnest cogeneration plant, Kamloops energy recovery cogeneration plant, Revelstoke Unit 5 generation station, and Crystal Peak garnet mine.

	Location	Investment	Jobs		Status of Review
		($Million)	Construction (person-years)	Operating (permanent)	
LNG storage facility Westcoast Gas Services Inc.	Lower Mainland	120.0	125	12	Referral documents sent to Ministers for decision
Pingston Creek hydroelectric power plant Canadian Hydro Inc	60 km south of Revelstoke	35.0	127	1	EAO preparing referral package for Ministers' decision
Southern Crossing pipeline BC Gas Utility Ltd.	Southern B.C. between Yahk and Oliver	344.6	900	–	Project committee reviewing application
Energy Totals		**499.6**	**1,152**	**13**	
Bronson Slope gold & copper mine International Skyline Gold	Iskut River region, 110 km northwest of Stewart	130.0	250	115	Awaiting project report from proponent
Prosperity gold mine Taseko Mines Ltd.	Near Chilko Park, 125 km southwest of Williams Lake	900.0	700	442	Awaiting project report from proponent
Red Chris copper & gold mine American Bullion Minerals	20 km southwest of Iskut	252.0	420	238	Awaiting project report from proponent
Telkwa coal mine Manalta Coal Ltd.	14 km south of Smithers	120.0	180	130	Awaiting project report from proponent
Silvertip lead, zinc, gold, silver mine Silvertip Mining Corporation	85 km southwest of Watson Lake	40.0	150	140	Awaiting project report from proponent
Mining Totals		**1,442.0**	**1,700**	**1,065**	

All numerical data provided by proponents.

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All numerical data provided by proponents.

SUMMARY OF PROJECTS UNDER REVIEW AS OF MARCH 31, 1999 CONT...

	Location	Investment ($Million)	Jobs: Construction (person-years)	Jobs: Operating (permanent)	Status of Review
Tourism & Recreation					
Garibaldi at Squamish ski resort Garibaldi Alpen Resorts (1996) Ltd.	13 km north of Squamish	237.8	3,048	6,501	Awaiting project report from proponent
Jumbo Glacier alpine resort Pheidias Project Management Corp.	Jumbo Valley 50 km west of Invermere	552.0	670	1,000	Awaiting project report from proponent
Melvin Creek/Cayoosh mountain resort NGR Resort Consultants Inc.	Between Pemberton and Lillooet	530.0	4,600	3,630	Awaiting project report from proponent
Tourism & Recreation Totals		**1,319.8**	**8,318**	**11,131**	
Transportation					
Greenville-Kincolith Road Ministry of Transportation & Highways	North of Nass River from Greenville to Kincolith	30.0	50	2	Awaiting project report from proponent
Transportation Totals		**30.0**	**50**	**2**	
GRAND TOTAL		3,291.4	11,220	12,211	

All numerical data provided by proponents.

Expenditures Of The Environmental Assessment Office

	1998/1999
Salaries and Benefits	
Base salaries	2,132,571
Supplementary salary costs	11,277
Employee benefits	476,120
Total salaries and benefits	**2,619,968**
Operating Costs	
Public servant travel	230,658
Professional services	637,459
Information systems - operating	175,984
Office and business expenses	188,949
Informational advertising and publications	83,069
Statutory notices, annual reports	25,569
Materials, supplies	41,178
Building occupancy charges	297,522
Total operating costs	**1,680,388**
Asset Acquisitions	
Information systems	77,423
Office furniture and equipment	-
Total asset acquisitions	**77,423**
Grants and Contributions	
Contributions - conditional grants	214,500
Total grants and contributions	**214,500**
TOTAL EXPENDITURES	**4,592,279**

	[illegible]	[illegible]	[illegible]		[illegible]
		($Million)	*Construction (person-years)*	*Operating (permanent)*	
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[illegible]		[illegible]	[illegible]	[illegible]	
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